Table 1-1. Specifications (1 of 3)

Electrical Characteristics	Performance Limits	Conditions
FREQUENCY		
Range	100 kHz to 990 MHz	
Resolution	100 Hz 250 Hz	
SPECTRAL PURITY		
Spurious Signals:		
Harmonics	~~<-30 dBc~~ <-25dBc	≤+7 dBm output levels
Non-harmonics	<-60 dBc	>5 kHz from carrier in CW mode
Sub-harmonics	None	
Residual Modulation		
CW Mode:		
AM (0.05 to 15 kHz Post Detection Noise Bandwidth)	<-70 dBc	0.1 to 990 MHz
FM (0.3 to 3 kHz Post Detection Noise Bandwidth)	<15 Hz rms <3 Hz rms <6 Hz rms <15 Hz rms	0.1 to 123.5 MHz 123.5 to 247 MHz 247 to 494 MHz 494 to 990 MHz
FM (0.05 to 15 kHz Post Detection Noise Bandwidth)	<30 Hz <8 Hz <16 Hz <30 Hz	0.1 to 123.5 MHz 123.5 to 247 MHz 247 to 494 MHz 494 to 990 MHz
OUTPUT		
Level Range	+13 dBm to -127 dBm	Into 50 ohms
Resolution	0.1 dB	
Absolute Level Accuracy[1]	≤±1.5 dB	Output levels of +13 dBm to -127 dBm; frequencies from 100 kHz to 990 MHz
Level Flatness	≤±1.0 dB	Output level setting of 0.0 dBm; frequencies from 100 kHz to 990 MHz
AMPLITUDE MODULATION		
Depth[2]	0 to 99%	Output levels of +7 dBm and below; frequencies from 100 kHz to 990 MHz
	0 to 30%	Output levels of +10 dBm and below; frequencies from 100 kHz to 990 MHz
Resolution	1%	
Incidental Phase Modulation	<0.3 radian peak	30% AM depth and internal rates

[1]Absolute level accuracy includes allowances for detector linearity, temperature, flatness, attenuator accuracy, and measurement error.
[2]AM depth is further limited by the Indicator Accuracy specification.

Table 1-1. Specifications (2 of 3)

Electrical Characteristics	Performance Limits	Conditions
AMPLITUDE MODULATION (Cont'd)		
Indicator Accuracy[2]	+2% (±4% of reading)	Depths <90% and internal rates
AM Rates:		
Internal	400 and 1 kHz, 23%	
External	25 Hz to 25 kHz	1 dB bandwidth, ac coupled
AM Distortion (internal rates)	<1.5% <3% <5%	0 to 30% AM 31 to 70% AM 71 to 90% AM
FM MODULATION		
Maximum Peak Deviation (Δfpk):[3]		
Rates ≥60 Hz	99 kHz 25 kHz 50 kHz 99 kHz	0.1 to 123.5 MHz (fc) 123.5 to 247 MHz (fc) 247 to 494 MHz (fc) 494 to 990 MHz (fc)
Rates <60 Hz	1600 x Rate 400 x Rate 800 x Rate 1600 x Rate	0.1 to 123.5 MHz (fc) 123.5 to 247 MHz (fc) 247 to 494 MHz (fc) 494 to 990 MHz (fc) (FM not specified for fc $-\Delta fpk$ <100 kHz)
Resolution	0.1 kHz 1 kHz	Deviations <10 kHz Deviations ≥10 kHz
Incidental AM	<0.1%	<20 kHz peak deviation and internal rates and carrier frequency 2500 kHz.
Indicator Accuracy[3]	+5% of reading	At internal rates. Add ±5%, if 250 Hz frequency increments are used.
FM Distortion (Total Harmonic Distortion)	<0.5%	100 Hz to 99 kHz peak deviations and internal rates.
FM Rates:		
Internal	400 and 1 kHz, ±3%	
External	25 Hz to 25 kHz	1 dB bandwidth, ac coupled
GENERAL		
Operating Temperature Range	0 to 55°C	
Power Requirements		
Line Voltage	100, 120, 220, or 240 Vac, +5%, –10%	

[2] AM depth is further limited by the Indicator Accuracy specification.
[3] FM deviation is further limited by the Indicator Accuracy specification.

Table 1-1. Specifications (3 of 3)

Electrical Characteristics	Performance Limits	Conditions
GENERAL (Cont'd)		
Line Frequency	48 to 66 Hz	
Power Dissipation	125VA maximum	
Conducted and Radiated Electromagnetic Interference	MIL STD 461A, VDE 0871	Conducted and radiated interference is within the requirements of methods CEO3 and RE02 of MIL STD 461A, VDE 0871, and CISPR Publication 11.
	<1.0 μV	Induced in a two-turn 2.5 cm (1 inch) diameter loop held 2.5 cm (1 inch) away from the front surface.
Net Weight	18.1 kg (40 lb)	
Dimensions (Full Envelope):		
Height width Depth	133 mm (5.25 in.) nominal 425 mm (16.75 in.) nominal 520 mm (20.5 in.) nominal.	NOTE: For ordering cabinet accessories, the module sizes are 51/4H, lMW, 17D.

Electrical Characteristics	Features
REMOTE OPERATION	
HP-IB (IEEE 488) Capability:	
Interface	Hewlett-Packard Interface Bus (HP-IB). HP-IB is Hewlett-Packard's implementation of IEEE Standard 488 (and the identical ANSI Standard MC1.l). The Signal Generator's compatibility with HP-IB is defined by the following list of interface functions: SHO, AH1, TO, L2, SRO, RL1, PPO, DC1, DTO, and CO.
Functions Controlled	All functions controlled from the front panel with the exception of DISPLAY, DISPLAY in conjunction with SEQ, Backspace, COARSE TUNE, FINE TUNE, and display HP-IB ADRS are programmable with the same accuracy and resolution as in local operation.